

4/1/00 455

**Site Management Plan (SMP) and the Master Project Plans (MMPs)
St. Juliens Creek Annex Site, Chesapeake, VA
Reponses to USEPA Review Comments**

General Content:

1. Please insure that all of the identified RCRA SWMUs and AOCs that require investigation are included in the final SMP, especially all ordnance production facilities, including but not limited to:

Building 190	-Medium Caliber Loading/Renovation Plant/Degreasing
Building 89	-Major Caliber Loading and Renovation Plant.
Building 46	-Medium Caliber Cartridge Renovation and Assembly
Building 39	-20 mm & 40 mm Breakdown Plant
Building 13	-Tank Renovation Plant
Building 18	-Fuse and Primer Renovation and Black Powder Filling
Building Me (M-5) Annex	-Medium Caliber Projectile Washout Plant
Building 272	-Pyrotechnics Renovation Plant
Building 41	-20 mm & 40 mm Renovation Building
Building 185	-Bag Loading operations/Ammunition Breakdown
Building 44	-Explosive Loading into railroad tank cars
Drainage swales	-Along Building 13
Bldgs. M-3/M-4/M-5	-Mark VI mine loading facility/Steam out
Building 188	-Pyrotechnic loading
Building 184	-Primer Renovation facility
Building 222	-Ammunition Steam out
Building 47	-Ammunition Degreasing operations
Building 227	-Ordnance Degreasing
Wharf Areas	-Ordnance Dumping
Building 163	-NBC Agents Storage area
Out falls 1,2,3,4	-Water Pollution Out falls Map, July 8, 1971.
Septic Drainage Field	-Southeast of Building 269
Septic Drainage Field	-Southwest of Building 305

Response to General Comment #1

Several of the SWMUs and AOCs discussed in the RFA identified general concerns relating to the ordnance operations that occurred at St. Juliens Creek Annex; however, specific information regarding the location and potential further action for several of these SWMUs and AOCs are not well defined in the RFA. The enclosed table, Table 1, was developed to address and respond to the buildings/locations listed in General Comment #1. This table is based on information and data found the RFA, the IAS (including interview notes used to compile the IAS report), and various correspondences regarding operations at the St. Juliens Creek Annex. The IAS interviews were conducted with long-time employees working at the Annex (at the time of the IAS) and retirees of the Annex; many of these individuals had over 30 years of knowledge of operations conducted at the Annex. These interviewed individuals included ordnance men, transportation (waste collection) personnel, facility planning/maintenance personnel, and supervisors/management.

The table contains information pertaining to the historical use for each building/location, identifies the specific RFA reference(s) to the each building/location, correlates the applicable RFA SWMU and/or AOC identifiers to each building/location, provides the current status of each building/location, and recommends the additional action for each building/location. In addition, the table includes other ordnance process buildings discussed in the RFA and/or identified in the review of other documentation. A revised form of Table 1 will be added to the SMP as Table 1-3, as will an explanation of this table and its content.

The review of the data and information compiled in this table summarizes the functional equivalent of an "AOC document evaluation", which will be required under the forthcoming Federal Facilities Agreement (FFA). The purpose of the AOC document evaluation is to address and evaluate identified AOCs to determine whether an AOC should proceed to the Site Screening Process (SSP) or that the AOC requires no further action. Although the St. Juliens Creek Annex has only been proposed to the National Priorities List (NPL), the Navy anticipates that the Annex will receive a final listing to the NPL within a year; at which time the Navy and EPA will begin the negotiation of an FFA for the St. Juliens Creek Annex. To be proactive in the development of the FFA, as a response to the EPA's SMP comments the Navy conducted an AOC document evaluation for the commented on buildings/locations (and other process buildings identified in the RFA and/or identified in the review of other documentation). As stated above, included in the table are the recommended additional action for each building/location, and the rationale and basis for each recommendation. Per the language contained in previous FFAs, the Navy requests a written response from EPA regarding this AOC document evaluation within 30-days of receipt. With concurrence, the Navy will prepare a brief AOC Close-Out document for the applicable AOCs and SWMUs.

2. In order to ensure a through evaluation of the facility, I recommend the inclusion of more in-depth descriptions of the following AOCs as identified in the EPA EPIC Aerial Photography Analysis:

Please include a more detailed description of the following:

- Former Waste Water Treatment Plant & Q.E. Lab (Building 277)
- 1974 Waste Disposal Area, near Buildings 176 & 179
- 1937 Waste Disposal Area, near Buildings 182, 181, & 348 (burning ground?)
- Site 7 expanded per 1964 aerial photography
- Mounded material and ground scarring, near Buildings 162, 341, & M-1
- 1937 excavated area to the northeast of Building 89
- 1974 pit northeast of Building 70

Response to General Comment #2

The Site Management Plan will be revised to contain a descriptive discussion of each of the 12 AOCs identified during the June 1999 review of the EPIC study by LANTDIV,

EPA and VDEQ Remedial Project Managers (RPMs). Specifically, Section 1.4.3 will be revised to reflect the occurrence of the EPIC study review and identification of 12 EPIC AOCs, and a new section, Section 2.1, will be added to provide a brief descriptive narrative of each EPIC AOC. Each AOC narrative will include the recommended action for that location. From the list provided in General Comment #2, the following were identified as EPIC AOCs and will be addressed in Section 2.1 of the Final SMP:

*1974 Waste Disposal Area, near Buildings 176 & 179 - (AOC #8),
1937 Waste Disposal Area, near Buildings 182, 181, & 348 - (AOC #1),
Mounded material and ground scarring, near Buildings 162, 341, & M-1 - (AOC #12).*

However, the following areas listed in General Content #2 were not identified as one of the 12 EPIC AOCs.

Former Waste Water Treatment Plant & Q.E. Lab (Building 277) – This location was identified as AOC K in the RFA. The Navy is researching the operational period and treatment process used by this wastewater plant; however, other than the following information taken from the IAS stated as very little additional information has been found.

“In addition, from 1942 to 1947, a small sewage treatment plant (bldg. 318) treated wastewater from the barracks. The barracks were torn down in 1947, and use of the plant was discontinued.”

Per the multiple interviews conducted in the compilation of the IAS, disposal of hazardous material or waste has not been documented at this location (also see response to General Content #3). To provide the requested information, AOC K has been added to Table 1, which will become Table 1-3 in the Final SMP. While sampling at AOC K is not proposed for the planned SSA field investigation, the SSA report will provide additional information pertaining to the history and operations of this treatment plant, and recommend additional action for this location.

Site 7 expanded per 1964 aerial photography – Site 7 is identified for investigation in the planned Site Screening Assessment (SSA). The SSA investigation will include a review and screening of existing analytical data collected at the site and other information. Additional review of aerial photography of Site 7 shows the site to occupy its largest area, and being fenced, beginning in 1970. Figure 2-7 in the SMP will be revised to show the fences boundaries of Site 7.

1937 excavated area to the northeast of Building 89 – The area to the north of and in the vicinity of Buildings 87, 88, and 89 was low during the time of construction, 1919. Per review of historical “work requests”, the Navy periodically used hydraulic fill in this area to “...reclaim land by filling in of low swampy areas...”. If requested, this area can be added as EPIC AOC #13 and included in the revised Table 1-3, Section 1.4.3 and Section 2.1 of the Final SMP (see above); however, no further action is proposed for this area.

1974 pit northeast of Building 70 – This area was discussed during the February 25, 2000 site visit with EPA and DEQ; however, the “pit” could not be identified with further

review of the aerial photography; therefore, no further action is proposed for this area. However, if requested, this area can be added as EPIC AOC #14 and included in the revised Table 1-3, Section 1.4.3 and Section 2.1 of the Final SMP (see above).

3. The following sites are listed as site screening areas based upon EPA interviews:

- Interview with Rodney Bradley -telephone # (757) 487-0244, 6/95
 - A. Building 10 –“Popping Oven”
 - B. Building 277 -Explosive Testing Lab
- Interview with Bill Davis -telephone # (757) 887-7441, 6/95
 - A. Marsh Behind Bldg. 190 -Dump Area
 - B. Building 190 -In late 1960s, had an explosion.

Response to General Comment #3

The Navy has not reviewed the interview notes from EPA interviews conducted in June 1995; however, the following information is provided based on additional review of previous reports (including the interview notes used to generate the IAS report), aerial photograph, and relevant correspondence. The IAS interviews were conducted with long-time employees working at the Annex (at the time of the IAS) and retirees of the Annex; many of these individuals had over 30 years of knowledge of operations conducted at the Annex. These interviewed individuals included ordnance men, transportation (waste collection) personnel, facility planning/maintenance personnel, and supervisors/management.

- Interview with Rodney Bradley -telephone # (757) 487-0244, 6/95
 - A. Building 10 –“Popping Oven”
 - B. Building 277 -Explosive Testing Lab

Building 10 was constructed in 1918 as a smokeless powder lab/magazine, as were Building 6, 7, and 8. Building 10 is currently used as administration spaces for PWC. There is no mention of Building 10 or any “popping oven” in the IAS, or in any of the numerous interviews conducted to compile information on the Annex. In November 1975, Naval Weapons Station Yorktown (NWSY) identified many buildings for reuse during the disestablishment of ammunition functions at the Annex. Included in this list was Building 10, scheduled for reuse on 1/1/76; however, building decontamination was identified as being required prior to the release of Building 10. In June 1976, Naval Ammunition Production Engineering Center (NAPEC) developed procedures and cost estimates to decontaminate the former NWSY ordnance process buildings/structures to complete the disestablishment of the Annex’s ammunition functions and complete the transfer the Annex from NWSY to Norfolk Naval Shipyard (NNSY). Building 10 was not identified by NAPEC as requiring decontamination, although Building 6, 7, and 8 were identified and categorized for decontamination as “....(2) smokeless powder and explosive item (explosives not exposed) storage magazines/warehouses...”.

The decontamination procedures for Building 6, 7, and 8 included sweeping all loose material from floors and walls, washing of the floors and walls, re-sweeping floors and walls, and inspection of the facilities. Building 10 was used primarily for smokeless powder storage, as were Building 6, 7, and 8. As the recommended decontamination procedures are not extensive for this type of storage, and the fact that Building 10 was not identified for decontamination by NAPEC, the Navy concludes that Building 10 had been decontaminated and converted to administrative spaces in late 1975, prior to the NAPEC investigation. Therefore, the Navy recommends no further action Building 10, and that this location not be included as a site screening area. Although Buildings 6, 7, 8 and 10 are not specifically listed in the RFA, the Navy will document the operations at these buildings as part of RFA AOC G "Former Process Buildings" and has included these buildings in Table 1, which will become Table 1-3 of the Final SMP.

Building 277 was constructed in 1955 as a Quality Evaluation Lab (QE Lab) and currently used as a Communications Center. Interviews conducted to compile information for the IAS indicate that loaded ordnance was inspected using radiography in Building 277. The QE Lab functioned as part of the Annex's Inspection Department; there is no report of disposal of hazardous material /waste or ordnance materials at this location. In June 1976, NAPEC developed procedures and cost estimates to decontaminate the former NWSY ordnance process buildings/structures to complete the disestablishment of the Annex's ammunition functions and complete the transfer the Annex from NWSY to the NNSY. The radiographic test cells in Building 277 and the QE Lab's support magazine, Building 358, were identified for decontamination. The decontamination of these buildings, sweeping loose debris, water wash, and re-sweeping of the areas, was verified by NAPEC in 1977. Therefore, the Navy recommends no further action Building 277, and that this location not be included as a site screening area. Although Buildings 277 and 358 are not specifically identified in the RFA, the Navy will document the operations at these buildings as part of RFA AOC G "Former Process Buildings" and has included these buildings in Table 1, which will become Table 1-3 of the Final SMP.

- Interview with Bill Davis -telephone # (757) 887-7441, 6/95
 - A. Marsh Behind Bldg. 190 -Dump Area
 - B. Building 190 -In late 1960s, had an explosion.

Review of aerial photography does not reveal a potential waste disposal area in the marshy area behind Building 190. There are reports of ordnance waste disposal between Buildings M-5 and 190; this area is being investigated as Installation Restoration Program (IRP) Site 19. In addition, during the review of aerial photographs, a location in the marsh by Building M-5 (in the general vicinity of Building of Building 190) was identified. Geophysical evaluation and sampling will be conducted at this possible waste disposal area, EPIC AOC #12, in the upcoming SSA field investigation. Due to the proximity of the marsh behind Building 190 to Blows Creek and Landfill D, and considering the extensive sediment/surface water sampling performed at Landfill D and in Blows Creek, it is likely that any residual contamination from this reported "dump area", if it exists, will be detected, evaluated and assessed in the ongoing RI/FS for

Landfill D. Therefore, the Navy recommends no further action for this location, and that this location not be included as a site screening area.

It is reported and documented that an explosion did occur in Building 190 in 1970, just after the Annex was transferred to NWSY. This explosion, in part, led to the decision to cease and disestablish the Annex's ammunition functions/capabilities and transfer the Annex from NWSY to NNSY. In June 1976, Naval Ammunition Production Engineering Center (NAPEC) developed procedures and cost estimates to decontaminate the former NWSY ordnance process buildings/structures to complete the disestablishment of the Annex's ammunition functions and complete the transfer of the Annex property. NAPEC developed decontamination procedures for Building 190 (including the surrounding area and under building), provided implementation oversight, and conducted inspection upon completion to determine compliance and effectiveness of decontamination procedures. Building 190 is scheduled for demolition in FY-00. Therefore, the Navy recommends no further action for Building 190, and that this location not be included as a site screening area.

Risk Assessment Issues

1. Section 5.1.2 - Sampling and Analysis Plan
Re FSP: An additional table indicating the depths of wells and their associated lithology/geologic unit should be added to the list noted in this section.

Response to Risk Assessment Issues #1

The text will be revised to include the requirement for a table indicating the depths of wells and their associated lithology/geologic unit.

2. Section 5.5.1.3 Toxicity Assessment.
This section states that one source for toxicity data is the Environmental Criteria and Assessment Office. The name of the office has changed to National Center for Environmental Assessment (NCEA).

Response to Risk Assessment Issues #2

Comment noted. Text will be revised.

3. Section 5.6 Task 6: RI Report
An additional section should be added that discusses current and potential use of groundwater as a drinking water source. Local and/or state well records, and/or information from local water authorities, if applicable, should be investigated to document this section. Local ordinances, if any, should be described and provided as an Appendix. If domestic wells are not catalogued, a door to door well survey may be appropriate. This information is crucial for the Risk Assessment.

Response to Risk Assessment Issues #3

Information regarding local and/or state well records (to include domestic wells) will be provided in Section 5.6.3 Geology and Hydrogeology. When appropriate, this information as well as information regarding current and potential use of groundwater as a drinking water source, local ordinances, and information from local water authorities will be included in Section 5.6.9 Risk Assessment (and Appendixes if required). At this time, the inclusion of a separate section for this information is not planned.

4. Section 5.7, pages 5-18 and 5-19:

The first paragraph of this section states that the results of screening will either identify the area as requiring additional investigation, at which time the SSA will become an RI/FS site or no further remediation. I recommend that we consider a third alternative. There may be sites that do not rise to the level of an RI/FS, but still pose an unacceptable risk to human health and/or the environment, such as small hot spots. In these cases a removal action may be a cost effective alternative to an RI/FS.

Response to Risk Assessment Issues #4

Comment noted. The Removal Action alternative will be added to Section 5.7.

5. Section 5.6 Task 6: RI Report

An additional section should be added that discusses current and potential use of groundwater as a drinking water source. Local and/or state well records, and/or information from local water authorities, if applicable, should be investigated to document this section. Local ordinances, if any, should be described and provided as an Appendix. If domestic wells are not catalogued, a door to door well survey may be appropriate. This information is crucial for the Risk Assessment.

Response to Risk Assessment Issues #5

This comment is the same comment as Comment 3 above (the comment was provided twice).

Information regarding local and/or state well records (to include domestic wells) will be provided in Section 5.6.3 Geology and Hydrogeology. When appropriate, this information as well as information regarding current and potential use of groundwater as a drinking water source, local ordinances, and information from local water authorities will be included in Section 5.6.9 Risk Assessment (and Appendixes if required). At this time, the inclusion of a separate section for this information is not planned.

6. Section 5.6.7 Nature and Extent of Contamination...

should be depicted for all media using scaled maps and included in the discussion of results.

Response to Risk Assessment Issues #6

Contaminant concentration maps for each media will be provided.

7. Section 5.7.1 Human Health Risk Screening:

The second bullet states that contaminants that are detected in less than five percent of samples in a given medium where at least 20 samples have been collected will not be

considered COPCs. Risk Assessment Guidance for Superfund Volume I part A (section 5.9.3, page 5.22) is clear on the use of frequency of detection criteria for eliminating COPCs. There are three criteria which must be met in order to consider a chemical a candidate for elimination: one, it is detected infrequently; two, it is not detected in any other sample media or at high concentrations; and three, there is no reason to believe that the chemical may be present. I recommend that we only consider frequency of detection in COPC selection when it meets all three criteria as stated in RAGS Volume I (part A). I recommend that the text include all three criteria.

Response to Risk Assessment Issues #7

Task 7: Evaluation of Site Screening Areas discusses the human health and ecological risk screening process for Site Screening Areas (newly discovered areas with little or no information available). At these areas, the intent is not to conduct a full risk assessment (similar to an RI) but to identify areas requiring additional investigation. With this in mind, no changes to the process for developing COPCs (as outlined in Section 5.7.1) are recommended.

8. Section 5.7.1 Human Health Risk Screening:

Bullet three deals with comparison to background. Considering naturally occurring levels is very important when determining a release, calculating risk and setting PRGs. It is an issue that warrants more detail than what is presented in the text. For example, there should be a minimum of two statistical tests for background comparison: one for hotspot detection (such as the 95th upper tolerance limit on the 95th percentile measurement) and one for a comparison of the mean of on site samples with the mean of background samples (such as the Students t-test or Wilcoxon Rank Sum test). We also need to agree on the number and location of background samples. I also recommend that we remain cautious with regard to removing COPCs a priori rather than carrying them through the risk assessment.

Response to Risk Assessment Issues #8

As stated in Response 7 above, Task 7: Evaluation of Site Screening Areas discusses the human health and ecological risk screening process for Site Screening Areas (newly discovered areas with little or no information available). The development of COPCs during the Site Screening Process, is to help identify areas requiring additional investigation (additional investigations could include conducting an RI). At this time, no changes to the process for developing COPCs (as outlined in Section 5.7.1) are recommended.

9. Section 5.7.1 Human Health Risk Screening:

Bullet six on page 5-20 deals with tentatively identified compounds (TICs). I agree that there is no need to include TICs in the quantitative risk assessment when they are detected at low levels and there is no information to indicate that they may be site related. However, I recommend that rationale for excluding TICs be included in the text.

Response to Risk Assessment Issues #9

Comment noted. The reporting document will include text explaining the rationale for excluding TICs.

Ecological Concerns

General Response to Ecological Concerns Issues

LANTDIV and CHESDIV provide the Navy's Installation Restoration project management for the Navy and Marine Corps facilities under the cognizance of EPA Region III. The Navy was conducting ecological risk assessments (ERAs) following the EPA's ERT ERA guidance; however, the technical approach implementing these ERAs was inconsistent between LANTDIV and CHESDIV, and to an extent varied between the individual Remedial Project Managers (RPMs) within each oversight management organization. These inconsistencies caused extensive comments on Navy and Marine Corps ERA documents by the EPA's BTAG, which in turn increased the likelihood of additional fieldwork to fulfill identified data gaps. This process extended the planned duration of the remedial investigation (RI) phase and was the source of considerable tension between the Navy and the EPA regarding the assessment of ecological risk. The Navy-Virginia Tier II Partnering Team was approached by several Tier I partnering teams for assistance to conduct consistent ERAs at Navy and Marine Corps facilities that complied with both the EPA's ERT guidance and Navy policy. The Tier II tasked members of the BTAG and the Navy's ecological support staff to form a sub-group and develop a "Navy/EPA - Tier II ERA approach for EPA Region III" which was accomplished in mid-1999. Following the development of this approach, this sub-group provided a workshop to each Tier I partnering team to explain the ERA process, and how the Navy and EPA's BTAG have agreed to implement the ERA process with EPA Region III.

Following this mutually agreed upon technical approach, the Navy prepared and submitted the *Draft Technical Memorandum, Ecological Risk Assessment Approach, Sites 2, 3, 4, and 5, St. Juliens Creek Annex, Chesapeake, Virginia* dated November 1999. Members of the EPA's BTAG, Mr. Simeon Hahn (NOAA-BTAG) and Mr. John McCloskey (USFWS-BTAG) conducted a site visit and attended a work-in-progress meeting on November 30, 1999 to discuss the ERA approach outlined in the submitted technical memorandum and attend the Tier II sub-group ERA workshop. The BTAG submitted formal comments on the ERA approach for Sites 2, 3, 4, and 5 in a letter dated December 20, 1999; these comments were discussed and resolved during a January 7, 2000 conference call between Mr. Hahn, Mr. McCloskey, Mr. Tim Reisch (LANTDIV), Ms. Chris Wallace (LANTDIV), Mr. Bruce Pluta [CDM Federal (currently EPA Region III BTAG coordinator)], and Ms. Lynne France (CDM Federal). This group discussed the objectives of the ERA technical memorandum for the sites with work underway, and the application of the outlined approach to other St. Julien Creek Annex sites. It was mutually agreed that the process outlined in the technical memorandum was consistent with EPA's ERT ERA guidance and Navy policy concerning the evaluation of ecological risk. In addition, the group agreed that the generalized approach, as contained in the technical memorandum, would suffice as the generic approach to initiate the ERA process at additional St. Julien Creek Annex sites (i.e. Section 5.5.2 of the Master Project Plans "RI Baseline Ecological Risk Assessment"). The group also agreed that the minutes of the January 7, 2000 conference call would serve as the typical "response to

comments" letter and document the agreements reached to resolve the BTAG concerns/issues without having the Navy revising and submitting a final technical memorandum.

With this background information, the following is provided to clarify the specific Ecological Risk comments received. The Navy does not intend on revising this section in the Master Project Plans, as the approach for conducting ERAs is consistent with EPA's ERT ERA guidance and Navy policy, and was developed a joint effort between the Navy and the EPA-BTAG.

1. Section 3 Environmental Setting:

Section 3.2 should discuss the general aquatic habitats associated with the surface drainage (i.e. hydrology) in the vicinity of the site. The document states that in recent years the Commonwealth of VA has noted that the concentrations of oil and grease, heavy metals, and coliform bacteria in the waters have increased. I believe the most recent data, as stated in the Elizabeth River project newsletter, indicates that these contaminant levels have decreased. The section also should include information on wetland and terrestrial habitats at the site. The information will be important when addressing ARAR's identified in Section 4.0.

Response to Ecological Concerns Comment #1

The timeframe should be considered, and referenced, when discussing the increase or decrease of the concentrations of oil and grease, heavy metals, and coliform bacteria in the waters of the Elizabeth River. The Navy will revise this section to include and reference the information provided by the Elizabeth River Project.

As agreed upon by the BTAG, the information contained in the Master Project Plans lays out the generic approach that will be followed to assess ecological risk at future sites at St. Juliens Creek Annex. The specific environmental setting and conceptual model is intended to be generic; site specific information will be presented and discussed in individual Screening ERAs.

2. Page 5-13 General Methodology for the Screening ERA.

The document states that site assessments will consider on-site and perimeter data first; evaluations will continue downgradient as results warrant. The site assessment should be based on the site conceptual model, which includes fate and transport information. In many instances the releases are from historic pathways and/or site conditions at the site or perimeter have changed since site activity was conducted. This approach is clearly outlined in the 1997 EPA ERA Guidance document and DoD/Navy guidance as well.

The ERA terminology should be consistent with the EPA Guidance. Step 1 is the Screening Level Problem Formulation and Ecological Effects Evaluation, not screening values. Step 2 is the screening level exposure estimate, not food chain considerations. Note screening against benchmarks (i.e. direct toxicity) and food chain considerations are not sequential steps.

Response to Ecological Concerns Comment #2

The issue of historic pathways was discussed as part of the Ecological Risk Assessment Approach Technical Memorandum for Site 2, 3, 4, and 5. The language in this Technical Approach Memorandum, as agreed upon by the eco-subgroup, is the same language used in the Master Project Plan. The Navy considers fate and transport of contaminants for each site where the Site Conceptual Model indicates a complete exposure pathway. For sites with a complete exposure pathway to a surface water body off of Navy property, contamination will be evaluated starting at the source (i.e. the site) through the pathway. Data will be evaluated to determine if a contamination gradient through the pathway exists. The Navy will not, however, investigate only the end of a pathway (i.e. a surface water body off of Navy property) in the absence of a contamination gradient that links contamination to the site.

As agreed by the Navy/EPA - Tier II ERA sub-group, direct screening against BTAG benchmark values, and approved alternative screening values, and food chain modeling for bioaccumulative chemical will be done concurrently.

3. Section 5.6 indicates that the RI report would only contain screening ERA's. The screening ERA should be included before or within the RI workplan. If a baseline ERA is warranted it should be included in the RI report. The baseline ERA information will need to be available to perform a thorough Feasibility Study (Section 6 of this document).

Response to Ecological Concerns Comment #3(a)

A Screening ERA will be completed for each applicable St. Julien Creek Annex site at the completion of the Site Assessment investigation. If a site warrants additional investigation, moving the site into the RI/FS phase, a "Step 3a" ERA will be contained in the RI report for that site. The text will be revised to this process approach as agreed to by the Navy/EPA - Tier II ERA sub-group. If a baseline ERA is required, it will be conducted prior to the initiation of the Feasibility Study.

The Master Field Sampling plan has a section for Biota sampling which includes methods for collecting aquatic macroinvertebrates and fish. Other ecological receptors may be collected as indicated in this section. The section should also indicate common laboratory tests for assessing ecological risk as there is a reasonable likelihood that they will be used in the BERA.

Response to Ecological Concerns Comment #3(b)

The Navy concurs with the intent of this comment; however, due to the spectrum of test methods available to assess ecological risk, and the specificity of many of the tests, the Navy will provide specific Standard Operating Procedures (SOPs) for specific ecological sampling and analysis on a site-by-site basis in the workplans developed for baseline ERAs, as required.

TABLE 1: St. Juliens Creek Annex, AOC & SWMU Document Evaluation

AOC/SWMU DESCRIPTION (EPA SMP REVIEW COMMENTS FOR INCLUSION INTO INSTALLATION RESTORATION PROGRAM)	YEAR CONSTRUCTED • ORIGINAL USE • (CONVERTED USE)	CURRENT STATUS	RFA No.	SECTION / DESCRIPTION IN RFA	PREVIOUS ACTION	ADDITIONAL ACTION
Building 190 (1940s-1970s) Medium Caliber Loading/Renovation Plant/Degreasing (General Comments #1 & 3)	1942 • Projectile Loading Plant • (Storage)	FY00 DEMOLISHION PLANNED	AOC J	Projectile Loading (1940s – 1970s)	Decontamination of Building 190 (including surrounding area and under building) and process equipment; Naval Ammunition Production Engineering Center (NAPEC) developed decontamination procedures, provided implementation oversight, and conducted inspection upon completion to determine compliance and effectiveness of decontamination.	Since Building 190 was decontaminated in the 1970s, it has been used for storage. It is currently vacant and planned for demolition in FY-00. The Navy plans no further action (NFA) for Building 190.
				Ordnance (hardware) degreasing	Spent solvents from this operation, ordnance (cartridge) degreasing, at Building 190 (and 227 were reportedly disposed of at the Burning Grounds (Site 5).	Site 5 is under investigation (RI); contamination from this source will be identified and addressed in future actions taken at Site 5. The Navy plans no further action (NFA) for Building 190.
Building 89 (1908-1970s) Major Caliber Loading and Renovation Plant (General Comment #1)	1919 • Projectile Loading Plant • (Storage)	FY00 DEMOLISHION PLANNED	AOC J	Projectile Loading (1908-1970s)	Decontamination of Building 89 (including surrounding area and under building) and process equipment; Naval Ammunition Production Engineering Center (NAPEC) developed decontamination procedures, provided implementation oversight, and conducted inspection upon completion to determine compliance and effectiveness of decontamination.	Since Building 89 was decontaminated in the 1970s, it has been used for storage. It is currently vacant and planned for demolition in FY-00. The Navy plans no further action (NFA) for Building 89.
Building 46 Medium Caliber Cartridge Renovation and Assembly (General Comment #1)	1916 • Filling Assembly Plant • (Machine Shop & Administrative)	FY00 DEMOLISHION PLANNED	AOC G	Smokeless Powder Loading De-Militarization (Ammunition Breakdown)	Decontamination of Building 46 (including surrounding area and under building) and process equipment; Naval Ammunition Production Engineering Center (NAPEC) developed decontamination procedures, provided implementation oversight, and conducted inspection upon completion to determine compliance and effectiveness of decontamination.	Since Building 46 was decontaminated in the 1970s, it has been used as a machine shop with some administrative spaces. It is currently vacant and planned for demolition in FY-00. The Navy plans no further action (NFA) for Building 46.
Building 39 20 mm & 40 mm Breakdown Plant (General Comment #1)	1913 • Magazine Breakdown • (Storage)	FY02 DEMOLISHION PLANNED	AOC G	Smokeless Powder Loading De-Militarization (Ammunition Breakdown)	Decontamination of Building 39 (including surrounding area and under building) and process equipment; Naval Ammunition Production Engineering Center (NAPEC) developed decontamination procedures, provided implementation oversight, and conducted inspection upon completion to determine compliance and effectiveness of decontamination.	Since Building 39 was decontaminated in the 1970s, it has been used for storage. It is currently vacant and planned for demolition in FY-02. The Navy plans no further action (NFA) for Building 39.
Building 13 Tank Renovation Plant (drainage swales along Building 13) (General Comment #1)	1903 • Machine Shop • (SIMA)	FY00 DEMOLISHION PLANNED	SWMU #31	Powder can wash discharge	The drainage swale identified as SWMU #31 was filled prior to 1937, and the area has been paved since the 1940s; the recipient water body (tidal marsh) is the low-lying area of Landfill B (Site 2).	Landfill B (Site 2) is under investigation (RI); contamination from this source will be identified and addressed in future actions taken at Site 2; therefore, the Navy plans NFA for SWMU #13.
			SWMU #14	Ordnance (cartridge) degreasing	Identified as IRP Site 10 - hazardous waste disposal at railroad tracks	SWMU #14 is under investigation as IRP Site 10.
Building 18 Fuse and Primer Renovation and Black Powder Filling (General Comment #1)	1905 • Prepared Ammo Fill • (Cryogenics School)	All tenet commands are scheduled for relocation by FY-07. Structure identified for future demolition.	AOC G	Projectile Loading	Decontamination of Building 18 (including surrounding area and under building) and process equipment; Naval Ammunition Production Engineering Center (NAPEC) developed decontamination procedures, provided implementation oversight, and conducted inspection upon completion to determine compliance and effectiveness of decontamination.	Since Building 18 was decontaminated in the 1970s, it has been used by the Fleet Training Command (FTC) as a Cryogenics School. The Navy plans no further action (NFA) for Building 18.
Building M-5 Annex Medium Caliber Projectile Washout Plant (General Comment #1)	(1949-1958)* • Projectile Overhaul	DEMOLISHED (1982-1985)*	AOC J	Mine Loading De-Militarization (Steam-Out)	Decontamination of Building M-5 Annex (including surrounding area and under building) and process equipment; Naval Ammunition Production Engineering Center (NAPEC) developed decontamination procedures, provided implementation oversight, and conducted inspection upon completion to determine compliance and effectiveness of decontamination.	Building M-5 Annex was demolished between 1982 and 1985. The Navy plans no further action (NFA) for Building M-5 Annex.
Building 272 Pyrotechnics Renovation Plant (General Comment #1)	1953 • Pyrotechnics Segregation and Renovation • (Storage)	FY02 DEMOLISHION PLANNED	AOC G	No specific reference in RFA	Building was not identified as requiring decontamination by the Naval Ammunition Production Engineering Center (NAPEC) in the assessment of the St. Juliens Creek Annex.	Building 272 is within the area being investigated as part of the Burning Grounds (Site 5) which is under investigation (RI); contamination from this source will be identified and addressed in future actions taken at Site 5. The Navy plans no further action (NFA) for Building 272.

TABLE 1: St. Juliens Creek Annex, AOC & SWMU Document Evaluation						
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Building 41 20 mm & 40 mm Renovation Building (General Comment #1)	1913 • 20mm Assembly Plant • (Shipping & Receiving)	FY02 DEMOLISHION PLANNED	AOC G	Smokeless Powder Loading	Decontamination of Building 41 (including surrounding area and under building) and process equipment; Naval Ammunition Production Engineering Center (NAPEC) developed decontamination procedures, provided implementation oversight, and conducted inspection upon completion to determine compliance and effectiveness of decontamination.	Since Building 41 was decontaminated in the 1970s, it has been used a facility for shipping and receiving for FTSC LANT. The Navy plans no further action (NFA) for Building 41.
Building 185 Bag Loading operations/Ammunition Breakdown (General Comment #1)	1941 • Powder Stack/Fill • (Administrative)	DEMOLISHED (1985-1990)*	AOC G	Smokeless Powder Loading De-Militarization (Ammunition Breakdown)	Decontamination of Building 185 (including surrounding area and under building) and process equipment; Naval Ammunition Production Engineering Center (NAPEC) developed decontamination procedures, provided implementation oversight, and conducted inspection upon completion to determine compliance and effectiveness of decontamination.	After Building 185 was decontaminated in the 1970s, it was used for OCFS administration spaces prior to demolition between 1985-1990. The Navy plans no further action (NFA) for Building 185.
Building 44 Explosive Loading into railroad tank cars (1930s) (General Comment #1)	(<1937)* • Inert Material (Storehouse)	DEMOLISHED (1982-1985)*	AOC G	Smokeless powder loaded into tank cars (mid-1930s)	Decontamination of Building 44 occurred in the mid 1970s; Naval Ammunition Production Engineering Center (NAPEC) developed decontamination procedures, provided implementation oversight, and conducted inspection upon completion to determine compliance and effectiveness of decontamination.	No reports of disposal or spills are documented at this location; however, these reports indicate that excess materials form ordnance processing were cleaned up and disposed at the Burning Grounds (Site 5). Building 44 was demolished between 1982-1985. The Navy plans no further action (NFA) for Building 44.
Drainage Swales (along Building 13) (General Comment #1)	1903 • Machine Shop • (SIMA)	FY00 DEMOLISHION PLANNED	SWMU #31	Rinsate generated from washing of smokeless powder cans in Buildings 13 and 47 was discharged to this swale.	The drainage swale identified as SWMU #31 has been filled and paved since the 1940s; the recipient water body (tidal marsh) is the low-lying area of Landfill B (Site 2).	Landfill B (Site 2) is under investigation (RI); contamination from this source will be identified and addressed in future actions taken at Site 2; therefore, the Navy plans NFA for SWMU #13.
Building M-3 Mark VI mine loading facility/Steam out (General Comment #1)	1918 • TNT Kettles • (ILO Outfitting)	All tenet commands are scheduled for relocation by FY-07. Structure identified for future demolition.	AOC J	Mine Loading	Decontamination of Building M-3 occurred in the mid 1970s; Naval Ammunition Production Engineering Center (NAPEC) developed decontamination procedures, provided implementation oversight, and conducted inspection upon completion to determine compliance and effectiveness of decontamination.	Since Building M-3 was decontaminated in the 1970s, it has been used for storage. It is currently vacant and planned for demolition, although the demolition has not been programmed for a specific fiscal year (FY). The Navy plans no further action (NFA) for Building M-3.
Building M-4 Mark VI mine loading facility/Steam out (General Comment #1)	1918 • Mine Conveyors • (ILO Outfitting)	All tenet commands are scheduled for relocation by FY-07. Structure identified for future demolition.	AOC J	Mine Loading	Decontamination of Building M-4 occurred in the mid 1970s; Naval Ammunition Production Engineering Center (NAPEC) developed decontamination procedures, provided implementation oversight, and conducted inspection upon completion to determine compliance and effectiveness of decontamination.	Since Building M-4 was decontaminated in the 1970s, it has been used for storage. It is currently vacant and planned for demolition, although the demolition has not been programmed for a specific fiscal year (FY). The Navy plans no further action (NFA) for Building M-4.
Building M-5 Mark VI mine loading facility/Steam out (General Comment #1)	1918 • Mines/Depth Charges • (ILO Outfitting)	All tenet commands are scheduled for relocation by FY-07. Structure identified for future demolition.	AOC J	Mine Loading De-Militarization (Steam Out)	Decontamination of Building M-3 occurred in the mid 1970s; Naval Ammunition Production Engineering Center (NAPEC) developed decontamination procedures, provided implementation oversight, and conducted inspection upon completion to determine compliance and effectiveness of decontamination.	Since Building M-3 was decontaminated in the 1970s, it has been used for storage. It is currently vacant and planned for demolition, although the demolition has not been programmed for a specific fiscal year (FY). The Navy plans no further action (NFA) for Building M-3.
			AOC D	Storm Water Outfall	Rinsate and drainage from various buildings have discharged to surface water bodies via Storm Water Outfall(s) (AOC D). The contamination migration from these buildings will be addressed as one operable unit (OU #1).	Additional Information required to determine further action. Review interview information and Navy documentation of facility permit record (NWSY & NNSY) and review facility utility drawing/maps to determine probable migration routes and additional action. While OU #1 is not proposed for the SSA field investigation, the SSA report will provide additional information and recommend additional investigation requirements.
Building 188 (1940s-1970s) Pyrotechnic loading (General Comment #1)	1942 • Environmental Storage • (ILO Storage)	All tenet commands are scheduled for relocation by FY-07. Structure identified for future demolition.	AOC J	Projectile Loading (1940s-1970s) Tracer & Pyrotechnic Loading	Decontamination of Building 188 (including surrounding area and under building) and process equipment; Naval Ammunition Production Engineering Center (NAPEC) developed decontamination procedures, provided implementation oversight, and conducted inspection upon completion to determine compliance and effectiveness of decontamination.	Since Building 188 was decontaminated in the 1970s, it has been used for storage. It is currently vacant and planned for demolition in FY-00. The Navy plans no further action (NFA) for Building 188.

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Building 184 Primer Renovation facility (General Comment #1)	1942 • Black Poser Quilt House	DEMOLISHED (1985-1986)*	AOC J	Ordnance Operations • Powder bag quilting	Decontamination of Building 184 (including surrounding area and under building) and process equipment; Naval Ammunition Production Engineering Center (NAPEC) developed decontamination procedures, provided implementation oversight, and conducted inspection upon completion to determine compliance and effectiveness of decontamination.	Building 184 was demolished between 1985-1986; the Navy plans no further action (NFA) for Building 184.
Building 222 Ammunition Steam out (General Comment #1)	Unknown • De-Militarization (Steam Out)	DEMOLISHED (after WWII)**	AOC J	Explosive steamout	Building 222 (Victory Building) demolished after WWII. The former location is directly adjacent to Site 5 and the berm running along the mid-section of Blows Creek.	Residual contamination from Building 222 will be investigated as part of the RI underway for the Burning Grounds (Site 5). Contamination from this source will be identified and addressed in future actions taken at Site 5; therefore, the Navy plans NFA for Building 222.
Building 47 Ammunition Degreasing (General Comment #1) Blasting grit disposal at Building 47	1916 • Cartridge Case Overhaul • (Repair Shop)	All tenet commands are scheduled for relocation by FY-07. Structure identified for future demolition.	SWMU #31	Powder can wash discharge	Decontamination of Building 47 occurred in the mid 1970s; Naval Ammunition Production Engineering Center (NAPEC) developed decontamination procedures, provided implementation oversight, and conducted inspection upon completion to determine compliance and effectiveness of decontamination. The drainage swale identified as SWMU #31 has been filled and paved since the 1940s; the recipient water body (tidal marsh) is the low-lying area of Landfill B (Site 2).	Landfill B (Site 2) is under investigation (RI); contamination from this source will be identified and addressed in future actions taken at Site 2; therefore, the Navy plans NFA for SWMU #13.
			AOC B AOC C	Air Compressor Oil Stain Blasting Grit Disposal	Identified as IRP Site 18 – blasting grit at Building 47	AOCs B & C under investigation as IRP Site 18.
			AOC D	Storm Water Outfall	Rinsate and drainage from various buildings have discharged to surface water bodies via Storm Water Outfall(s) (AOC D). The contamination migration from these buildings will be addressed as one operable unit (OU #1).	Additional Information required to determine further action. Review interview information and Navy documentation of facility permit record (NWSY & NNSY) and review facility utility drawing/maps to determine probable migration routes and additional action. While OU #1 is not proposed for the SSA field investigation, the SSA report will provide additional information and recommend additional investigation requirements.
Building 227 Ordnance (hardware) Degreasing (General Comment #1)	Unknown • Degreasing Building	DEMOLISHED (1982-1985)*	AOC G	Ordnance (cartridge) degreasing	Spent solvents from this operation, ordnance (cartridge) degreasing, at Building 227 (and 190) were reportedly disposed of at the Burning Grounds (site 5)	Site 5 is under investigation (RI); contamination from this source will be identified and addressed in future actions taken at Site 5. Building 227 was demolished between 1982-1985; the Navy plans no further action (NFA) for Building 227.
Wharf Area Ordnance Dumping		Planned for SSA Investigation	AOC I	Residual Ordnance at Wharf Areas	Area examined/searched by EOD divers in the 1970s. Pier Area is certified as decontaminated at the single "X" level. Additional action required if area transferred to non-DOD entities.	AOC I is under investigation as IRP Site 21.
Building 163 NBC Agents Storage area (General Comment #1)	1942 • Magazine • (Storage)	Under RCRA Closure	SWMU 11	Storage of NBC Agents, shipped to MCB Quantico for disposal. Used as 90-day hazardous waste storage area – under RCRA closure.	Building 163 is a magazine bunker and has been used for storage of non-ordnance materials. Currently, Building 163 is under RCRA Closure for hazardous waste storage > 90 days. This DEQ enforcement is with the Norfolk Naval Shipyard.	No further action is proposed for Building 163.
Out falls 1,2,3,4 Water Pollution Out falls Map, July 8, 1971. (General Comment #1)			SWMU 32 SWMU 33 AOC D	Overland Drainage Ditches Sewer Drainage System Storm Water Outfall	Rinsate and drainage from various buildings have discharged to surface water bodies via Overland Drainage Ditches (SWMU #32), Sewer Drainage System (SWMU #33), and Storm Water Outfall(s) (AOC D). The contamination migration from these buildings will be addressed as one operable unit (OU #1).	Additional Information required to determine further action. Review interview information and Navy documentation of facility permit record (NWSY & NNSY) and review facility utility drawing/maps to determine probable migration routes and additional action. While OU #1 is not proposed for the SSA field investigation, the SSA report will provide additional information and recommend additional investigation requirements.
Septic Drainage Field-Southeast of Building 269 (General Comment #1)	(1958-1961)* • Latrine	DEMOLISHED (>1990)*	n/a	No specific reference in RFA	Septic tank and tile field associated with Building 269 (constructed as a latrine). Per a Sanitary Facilities Survey of SJCA in 1963, this was the only active septic tank and tile field at SJCA. No reported or known releases of hazardous materials have occurred at this location.	No further action is proposed for this location.

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Septic Drainage Field-Southwest of Building 305 (General Comment #1)	1953 • Police HQ/Pass Office		n/a	No specific reference in RFA	Septic tank and tile field formally associated with Building 305 (constructed as a gatehouse with latrine facilities. Per a Sanitary Facilities Survey of SJCA in 1963, Building 305 latrine facilities discharge to the sanitary sewer. No reported or known releases of hazardous materials have occurred at this location.	No further action is proposed for this location.
Former Waste Water Treatment Plant (General Comment #2)	1943 • Sewage Plant		AOC K	Former Waste Water Treatment Plant	Small sewage treatment plant (Bldg. 318) treated wastewater from the barracks from 1942 to 1947. The barracks were torn down in 1947, and use of the plant was discontinued.	The Navy will provide available information pertaining to this location and recommend additional action for AOC K in the planned Site Screening Assessment report.
Building 10 (General Comment # 3)	1918 • smokeless powder lab/magazine • (Administration)	All tenet commands are scheduled for relocation by FY-07. Structure identified for future demolition.	AOC G	No specific reference in RFA	Building 10 was not identified as requiring decontamination by the Naval Ammunition Production Engineering Center (NAPEC) in the assessment of the St. Juliens Creek Annex. Based on review of documents, the Navy concludes that Building 10 was decontaminated and converted to administrative use prior to the NAPEC assessment.	Since Building 10 was decontaminated in the 1970s, it has been used as administration space by FTSC/LANT. The Navy plans no further action (NFA) for Building 10.
Building 6 (Not specifically identified by EPA in SMP review, information provided to adequately conduct the document evaluation of former ordnance related facilities – see response to General Comment #3)	1918 • smokeless powder lab/magazine • (Administration)	All tenet commands are scheduled for relocation by FY-07. Structure identified for future demolition.	AOC G	No specific reference in RFA	Decontamination of Building 6 (including surrounding area and under building) and process equipment; Naval Ammunition Production Engineering Center (NAPEC) developed decontamination procedures, provided implementation oversight, and conducted inspection upon completion to determine compliance and effectiveness of decontamination.	Since Building 6 was decontaminated in the 1970s, it has been used as administration space by PWC. The Navy plans no further action (NFA) for Building 6.
Building 7 (Not specifically identified by EPA, information provided to adequately conduct the document evaluation of former ordnance related facilities – see response to General Comment #3)	1918 • smokeless powder lab/magazine • (Administration)	All tenet commands are scheduled for relocation by FY-07. Structure identified for future demolition.	AOC G	No specific reference in RFA	Decontamination of Building 7 (including surrounding area and under building) and process equipment; Naval Ammunition Production Engineering Center (NAPEC) developed decontamination procedures, provided implementation oversight, and conducted inspection upon completion to determine compliance and effectiveness of decontamination.	Since Building 7 was decontaminated in the 1970s, it has been used as storage space by NWASP. The Navy plans no further action (NFA) for Building 7.
Building 8 (Not specifically identified by EPA, information provided to adequately conduct the document evaluation of former ordnance related facilities – see response to General Comment #3)	1918 • smokeless powder lab/magazine • (Administration)	All tenet commands are scheduled for relocation by FY-07. Structure identified for future demolition.	AOC G	No specific reference in RFA	Decontamination of Building 8 (including surrounding area and under building) and process equipment; Naval Ammunition Production Engineering Center (NAPEC) developed decontamination procedures, provided implementation oversight, and conducted inspection upon completion to determine compliance and effectiveness of decontamination.	Since Building 8 was decontaminated in the 1970s, it has been used as administration space by NIF. The Navy plans no further action (NFA) for Building 8.
Q.E. Lab (Building 277) (General Comments # 2 & 3)	1955 • Quality Evaluation Lab • (Communications Center)		AOC G	No specific reference in RFA	Decontamination of X-ray test cells in Building 277 and support magazine, Building 358; Naval Ammunition Production Engineering Center (NAPEC) developed decontamination procedures, provided implementation oversight, and conducted inspection upon completion to determine compliance and effectiveness of decontamination.	Since Building 277 was decontaminated in the 1970s, it has been used as a communication center. The Navy plans no further action (NFA) for Building 277.
Building 358 (Not specifically identified by EPA, information provided to adequately conduct the document evaluation of former ordnance related facilities – see response to General Comment #3)	1955 • Quality Evaluation Lab • (Communications Center)		AOC G	No specific reference in RFA	Decontamination of X-ray test cells in Building 277 and support magazine, Building 358; Naval Ammunition Production Engineering Center (NAPEC) developed decontamination procedures, provided implementation oversight, and conducted inspection upon completion to determine compliance and effectiveness of decontamination.	Since Building 358 was decontaminated in the 1970s, it has been used as a transmitter building. The Navy plans no further action (NFA) for Building 358.
Building 32 (Not specifically identified by EPA in SMP comments; however, building was identified in the RFA. Information provided to adequately conduct the document evaluation of former ordnance related facilities.)	unknown	DEMOLISHED (after WWII)**	AOC G	Smokeless Powder Loading	Demolished after WWII.	No further action is proposed for Building 32.
Building 32A (Not specifically identified by EPA in SMP comments; however, building was identified in the RFA. Information provided to adequately conduct the document evaluation of former ordnance related facilities.)	unknown	DEMOLISHED (after WWII)**	AOC G	Smokeless Powder Loading	Demolished after WWII.	No further action is proposed for Building 32A.

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Building 33 (Not specifically identified by EPA in SMP comments; however, building was identified in the RFA. Information provided to adequately conduct the document evaluation of former ordnance related facilities.)	unknown	DEMOLISHED (after WWII)**	AOC G	Smokeless Powder Loading	Demolished after WWII.	No further action is proposed for Building 33.
Building 12 (Not specifically identified by EPA in SMP comments; however, building was identified in the RFA. Information provided to adequately conduct the document evaluation of former ordnance related facilities.)	1902 • Major Calibre House • (Administrative)	All tenet commands are scheduled for relocation by FY-07. Structure identified for future demolition.	AOC J	Explosive Loading, "D" (1900s to 1930s)	Naval Ammunition Production Engineering Center (NAPEC) assessment of Building 12 determined that decontamination of this building was not required.	The Navy plans no further action (NFA) for Building 12.
Building 14 (Not specifically identified by EPA in SMP comments; however, building was identified in the RFA. Information provided to adequately conduct the document evaluation of former ordnance related facilities.)	1907 • Inert Storage • (Storage)	All tenet commands are scheduled for relocation by FY-07. Structure identified for future demolition.	AOC J	Explosive Loading, "D" (1900s to 1930s)	Naval Ammunition Production Engineering Center (NAPEC) assessment of Building 14 determined that decontamination of this building was not required.	The Navy plans no further action (NFA) for Building 14.
Building 43 (Not specifically identified by EPA in SMP comments; however, building was identified in the RFA. Information provided to adequately conduct the document evaluation of former ordnance related facilities.)	Unknown • Ammunition rework	DEMOLISHED (>1990)*	AOC J	Explosive Loading, "D" & "A-3" (1908 to 1970s)	Decontamination of Building 43 (including surrounding area and under building) and process equipment; Naval Ammunition Production Engineering Center (NAPEC) developed decontamination procedures, provided implementation oversight, and conducted inspection upon completion to determine compliance and effectiveness of decontamination.	Building 43 was demolished since 1990. The Navy plans no further action (NFA) for Building 43.
Building 193 (Not specifically identified by EPA in SMP comments; however, building was identified in the RFA. Information provided to adequately conduct the document evaluation of former ordnance related facilities.)	1942 • Expired Ordnance Shop • (Administrative)	DEMOLISHED (>1990)*	AOC G	Projectile Loading	Decontamination of Building 193 occurred in the mid 1970s; Naval Ammunition Production Engineering Center (NAPEC) developed decontamination procedures, provided implementation oversight, and conducted inspection upon completion to determine compliance and effectiveness of decontamination.	Building 193 was demolished since 1990. The Navy plans no further action (NFA) for Building 193.
Building 240 (Not specifically identified by EPA in SMP comments; however, building was identified in the RFA. Information provided to adequately conduct the document evaluation of former ordnance related facilities.)	1944 • D Sifting Building • (Storage)	DEMOLISHED (1998)	AOC G	Projectile Loading	Decontamination of Building 240 (including surrounding area and under building) and process equipment; Naval Ammunition Production Engineering Center (NAPEC) developed decontamination procedures, provided implementation oversight, and conducted inspection upon completion to determine compliance and effectiveness of decontamination.	Building 240 was demolished in 1998. The Navy plans no further action (NFA) for Building 240.
Building 241 (Not specifically identified by EPA in SMP comments; however, building was identified in the RFA. Information provided to adequately conduct the document evaluation of former ordnance related facilities.)	1944 • Vacuum Separator Building • (Storage)	DEMOLISHED (>1990)*	AOC G	Vacuum system for Building. 188	Decontamination of Building 241 (including surrounding area and under building) and process equipment; Naval Ammunition Production Engineering Center (NAPEC) developed decontamination procedures, provided implementation oversight, and conducted inspection upon completion to determine compliance and effectiveness of decontamination.	Building 241 was demolished since 1990. The Navy plans no further action (NFA) for Building 241.
Building 242 (Not specifically identified by EPA in SMP comments; however, building was identified in the RFA. Information provided to adequately conduct the document evaluation of former ordnance related facilities.)	1944 • Vacuum Separator Building • (Storage)	DEMOLISHED (>1990)*	AOC G	Vacuum system for Building. 188	Decontamination of Building 242 (including surrounding area and under building) and process equipment; Naval Ammunition Production Engineering Center (NAPEC) developed decontamination procedures, provided implementation oversight, and conducted inspection upon completion to determine compliance and effectiveness of decontamination.	Building 242 was demolished since 1990. The Navy plans no further action (NFA) for Building 242.
Building 243 (Not specifically identified by EPA in SMP comments; however, building was identified in the RFA. Information provided to adequately conduct the document evaluation of former ordnance related facilities.)	1944 • Vacuum Separator Building • (Storage)	DEMOLISHED (>1990)*	AOC G	Vacuum system for Building. 188	Decontamination of Building 243 (including surrounding area and under building) and process equipment; Naval Ammunition Production Engineering Center (NAPEC) developed decontamination procedures, provided implementation oversight, and conducted inspection upon completion to determine compliance and effectiveness of decontamination.	Building 243 was demolished since 1990. The Navy plans no further action (NFA) for Building 243.

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Building 256 (Not specifically identified by EPA in SMP comments; however, building was identified in the RFA. Information provided to adequately conduct the document evaluation of former ordnance related facilities.)	Unknown • Building 190 vacuum system	DEMOLISHED (1986-1990)*	AOC G	Projectile Loading (1940s-1970s)	Decontamination of Building 256 (including surrounding area and under building) and process equipment; Naval Ammunition Production Engineering Center (NAPEC) developed decontamination procedures, provided implementation oversight, and conducted inspection upon completion to determine compliance and effectiveness of decontamination.	Building 256 was demolished between 1986-1990. The Navy plans no further action (NFA) for Building 256.
Building 267 (Not specifically identified by EPA in SMP comments; however, building was identified in the RFA. Information provided to adequately conduct the document evaluation of former ordnance related facilities.)	Unknown • Building 89 vacuum system	DEMOLISHED (1982-1985)*	AOC G	Projectile Loading (1940s-1970s)	Decontamination of Building 267 (including surrounding area and under building) and process equipment; Naval Ammunition Production Engineering Center (NAPEC) developed decontamination procedures, provided implementation oversight, and conducted inspection upon completion to determine compliance and effectiveness of decontamination.	Building 267 was demolished between 1982-1985. The Navy plans no further action (NFA) for Building 267.
Building 29 (Not specifically identified by EPA in SMP comments; however, building was identified in the RFA. Information provided to adequately conduct the document evaluation of former ordnance related facilities.)	Unknown	DEMOLISHED After WWII)**	AOC G	Tracer & Pyrotechnics Mixing	Demolished after WW II	The Navy plans no further action (NFA) for Building 29.
Building 244 (Not specifically identified by EPA in SMP comments; however, building was identified in the RFA. Information provided to adequately conduct the document evaluation of former ordnance related facilities.)	Unknown • Projectile Transfer Building	DEMOLISHED (1982-1985)*	AOC G	De-Militarization -Fuze Drillout	Decontamination of Building 244 (including surrounding area and under building) and process equipment; Naval Ammunition Production Engineering Center (NAPEC) developed decontamination procedures, provided implementation oversight, and conducted inspection upon completion to determine compliance and effectiveness of decontamination.	Building 244 was demolished between 1982-1985. The Navy plans no further action (NFA) for Building 244.
Building 245 (Not specifically identified by EPA in SMP comments; however, building was identified in the RFA. Information provided to adequately conduct the document evaluation of former ordnance related facilities.)	Unknown • Ammunition Rework Shop	DEMOLISHED (1982-1985)*	AOC G	De-Militarization -Fuze Drillout	Decontamination of Building 245 (including surrounding area and under building) and process equipment; Naval Ammunition Production Engineering Center (NAPEC) developed decontamination procedures, provided implementation oversight, and conducted inspection upon completion to determine compliance and effectiveness of decontamination.	Building 245 was demolished between 1982-1985. The Navy plans no further action (NFA) for Building 245.
Building 246 (Not specifically identified by EPA in SMP comments; however, building was identified in the RFA. Information provided to adequately conduct the document evaluation of former ordnance related facilities.)	Unknown • Fuze Overhaul Shop	DEMOLISHED (1982-1985)*	AOC G	De-Militarization -Fuze Drillout	Decontamination of Building 246 (including surrounding area and under building) and process equipment; Naval Ammunition Production Engineering Center (NAPEC) developed decontamination procedures, provided implementation oversight, and conducted inspection upon completion to determine compliance and effectiveness of decontamination.	Building 246 was demolished between 1982-1985. The Navy plans no further action (NFA) for Building 246.
Buildings 11, 62, & 63 (Inert Storage Warehouses) (Not specifically identified by EPA in SMP comments or in the RFA. Information provided to adequately conduct the document evaluation of former ordnance related facilities.) Naval Ammunition Production Engineering Center (NAPEC) assessed these Inert Storage Warehouses as Category 1 for building decontamination.)	Various	All tenet commands are scheduled for relocation by FY-07. If not currently demolished, structure will be identified for future demolition.	AOC G	No specific reference in RFA	Naval Ammunition Production Engineering Center (NAPEC) developed building decontamination procedures, provided implementation oversight, and conducted inspection upon completion to determine compliance and effectiveness of decontamination.	The Navy plans no further action (NFA) for these buildings.
Buildings 24, 28, 141, & 251 (Bulk Black Powder Storage) (Not specifically identified by EPA in SMP comments or in the RFA. Information provided to adequately conduct the document evaluation of former ordnance related facilities.) Naval Ammunition Production Engineering Center (NAPEC) assessed these Bulk Black Powder Storage facilities as Category 2 for building decontamination.)	Various	All tenet commands are scheduled for relocation by FY-07. If not currently demolished, structure will be identified for future demolition.	AOC G	No specific reference in RFA	Naval Ammunition Production Engineering Center (NAPEC) developed building decontamination procedures, provided implementation oversight, and conducted inspection upon completion to determine compliance and effectiveness of decontamination.	The Navy plans no further action (NFA) for these buildings.

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AOC/SWMU DESCRIPTION (EPA SMP REVIEW COMMENTS FOR INCLUSION INTO INSTALLATION RESTORATION PROGRAM)	YEAR CONSTRUCTED • ORIGINAL USE • (CONVERTED USE)	CURRENT STATUS	RFA No.	SECTION / DESCRIPTION IN RFA	PREVIOUS ACTION	ADDITIONAL ACTION
Buildings 86, 87, & 88 (Explosive Item Storage – no exposed explosives) (Not specifically identified by EPA in SMP comments or in the RFA. Information provided to adequately conduct the document evaluation of former ordnance related facilities.) Naval Ammunition Production Engineering Center (NAPEC) assessed these Explosive Item Storage facilities as Category 2 for building decontamination.)	Various	All tenet commands are scheduled for relocation by FY-07. If not currently demolished, structure will be identified for future demolition.	AOC G	No specific reference in RFA	Naval Ammunition Production Engineering Center (NAPEC) developed building decontamination procedures, provided implementation oversight, and conducted inspection upon completion to determine compliance and effectiveness of decontamination.	The Navy plans no further action (NFA) for these buildings.
Buildings 59, 60, 61, 64, 65, 66, 67, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, & 84 (Explosive Loaded Items and Smokeless Powder Storage Magazines) (Not specifically identified by EPA in SMP comments or in the RFA. Information provided to adequately conduct the document evaluation of former ordnance related facilities.) Naval Ammunition Production Engineering Center (NAPEC) assessed these Explosive Loaded Items and Smokeless Powder Storage Magazines as Category 2 for building decontamination.)	Various	All tenet commands are scheduled for relocation by FY-07. If not currently demolished, structure will be identified for future demolition.	AOC G	No specific reference in RFA	Naval Ammunition Production Engineering Center (NAPEC) developed building decontamination procedures, provided implementation oversight, and conducted inspection upon completion to determine compliance and effectiveness of decontamination.	The Navy plans no further action (NFA) for these buildings.
Buildings 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, & 198 (Hi-Explosive Item Storage and Smokeless Powder Storage) (Not specifically identified by EPA in SMP comments or in the RFA. Information provided to adequately conduct the document evaluation of former ordnance related facilities.) Naval Ammunition Production Engineering Center (NAPEC) assessed these Hi-Explosive Item Storage and Smokeless Powder Storage facilities as Category 2 for building decontamination.)	Various	All tenet commands are scheduled for relocation by FY-07. If not currently demolished, structure will be identified for future demolition.	AOC G	No specific reference in RFA	Naval Ammunition Production Engineering Center (NAPEC) developed building decontamination procedures, provided implementation oversight, and conducted inspection upon completion to determine compliance and effectiveness of decontamination.	The Navy plans no further action (NFA) for these buildings.
Buildings 55, 56, & 57 (Inert and Explosive Loaded Item Storage) (Not specifically identified by EPA in SMP comments or in the RFA. Information provided to adequately conduct the document evaluation of former ordnance related facilities.) Naval Ammunition Production Engineering Center (NAPEC) assessed these Inert and Explosive Loaded Item Storage facilities as Category 2 for building decontamination.)	Various	All tenet commands are scheduled for relocation by FY-07. If not currently demolished, structure will be identified for future demolition.	AOC G	No specific reference in RFA	Naval Ammunition Production Engineering Center (NAPEC) developed building decontamination procedures, provided implementation oversight, and conducted inspection upon completion to determine compliance and effectiveness of decontamination.	The Navy plans no further action (NFA) for these buildings.
Buildings 16, 17, 38, & 40 (Smokeless Powder Storage) (Not specifically identified by EPA in SMP comments or in the RFA. Information provided to adequately conduct the document evaluation of former ordnance related facilities.) Naval Ammunition Production Engineering Center (NAPEC) assessed these Smokeless Powder Storage facilities as Category 2 for building decontamination.)	Various	All tenet commands are scheduled for relocation by FY-07. If not currently demolished, structure will be identified for future demolition.	AOC G	No specific reference in RFA	Naval Ammunition Production Engineering Center (NAPEC) developed building decontamination procedures, provided implementation oversight, and conducted inspection upon completion to determine compliance and effectiveness of decontamination.	The Navy plans no further action (NFA) for these buildings.
Buildings 161 & 162 (Bulk Hi-Explosive Support Buildings) (Not specifically identified by EPA in SMP comments or in the RFA. Information provided to adequately conduct the document evaluation of former ordnance related facilities.) Naval Ammunition Production Engineering Center (NAPEC) assessed these Bulk Hi-Explosive Support Buildings as Category 3 for building decontamination.)	Various	All tenet commands are scheduled for relocation by FY-07. If not currently demolished, structure will be identified for future demolition.	AOC G	No specific reference in RFA	Naval Ammunition Production Engineering Center (NAPEC) developed building decontamination procedures, provided implementation oversight, and conducted inspection upon completion to determine compliance and effectiveness of decontamination.	The Navy plans no further action (NFA) for these buildings.

TABLE 1: St. Juliens Creek Annex, AOC & SWMU Document Evaluation						
AOC/SWMU DESCRIPTION (EPA SMP REVIEW COMMENTS FOR INCLUSION INTO INSTALLATION RESTORATION PROGRAM)	YEAR CONSTRUCTED • ORGINIAL USE • (CONVERTED USE)	CURRENT STATUS	RFA No.	SECTION / DESCRIPTION IN RFA	PREVIOUS ACTION	ADDITIONAL ACTION
Buildings 218, 219, & 220 (Black Powder Quilting Support Buildings) (Not specifically identified by EPA in SMP comments or in the RFA. Information provided to adequately conduct the document evaluation of former ordanacc related facilities.) Naval Ammunition Production Engineering Center (NAPEC) assessed Black Powder Quilting Support Buildings as Category 1 for building decontamination.)	Various	All tenet commands are scheduled for relocation by FY-07. If not currently demolished, structure will be identified for future demolition.	AOC G	No specific reference in RFA	Naval Ammunition Production Engineering Center (NAPEC) developed building decontamination procedures, provided implementation oversight, and conducted inspection upon completion to determine compliance and effectiveness of decontamination.	The Navy plans no further action (NFA) for these buildings.

*Based on review of aerial photography
 **Based on RFA information